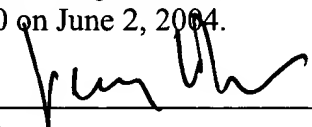


CERTIFICATE OF EXPRESS MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 2, 2004.



Jerry Cohen
Reg. No.: 20,522

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Michael E. MACK, *et al.*

Examiner: Lam S. NGUYEN

Serial No: 09/904,919

Art Unit: 2853

Filed: July 13, 2001

Confirmation No.: 4702

For: GAS CLUSTER ION BEAM SIZE DIAGNOSTICS AND WORKPIECE PROCESSING

PERKINS, SMITH & COHEN, LLP
One Beacon Street
Boston, Mass. 02108
(617) 854 4000

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Response (B) to Office Action Under 37 C.F.R. §1.111

Sir:

In response to the Office Action (non-final) dated 02 January 2004 in the above-captioned U.S. patent application, the rejections are respectfully traversed. A petition for a one-month extension of time and the associated small entity fee are being submitted herewith. Additional fees are believed unnecessary for consideration of this response, however, such fees are authorized to be charged to our Deposit Account No. 03-2410, Order No. 11460-112.

Claims 1-35 are currently pending in the application. Applicants thank the Examiner for noting the allowance of claims 25-30 and 32-35 and the allowability of claims 4-5, 7-8, 16-17, 19-20 and 31. Through the amendments and Remarks that follow, the rejections of claims 1-3, 6, 9-15, 18, 21-24 and objections to claims 4-5, 7-8, 16-17, 19-20 and 31 are respectfully traversed and overcome.

Amendments to the claims begin on page 3.

Remarks begin on page 9.